IV. Claims 1, 5, 7-9, 22-23, 25 and 27-32, drawn to a method for inducing a necrotic effect in a plant by transforming a plant with a gene including SEQ ID NO: 30 and 31 encoding PAP' protein.

V. Claims 1, 6-9, 22-23 and 26-32, drawn to a method for inducing a necrotic effect in a plant by transforming a plant with a gene including SEQ ID NO: 32 encoding PAP II protein.

VI. Claims 10-21 and 27-32 drawn to a method for inducing a necrotic effect in a plant by transforming a plant with a first and second chimeric genes encoding inactivated pokeweed antiviral and activator proteins, respectively.

VII. Claims 22-24, 27 and 29-32, drawn to a method for inducing a necrotic effect in a plant by transforming a plant with a gene encoding a precursor PAP molecule or a terminal deletion thereof including the pro-PAP-S protein of SEQ ID NO:2.

The Examiner contends that the inventions of Group I-VII are distinct, each from the other.

In response, Applicants provisionally elect with traverse to prosecute the invention of Group VII, i.e., claims 22-24, 27 and 29-32. With respect to the Examiner's restriction of the remaining inventions in Group I, II, III, IV, V, and VI, Applicants traverse.

Applicants respectfully point out that the subject matters of claims 2, 3, 4, and 22, and dependent claims thereof are improperly classified in Groups I, II, III, and VII since the claimed methods of claims 3 and 4 recite α and β subunit fragments of the same protein claimed in claim 2 (PAP-S), the biosynthetic precursor of which, pro-PAP-S, is in turn encompassed by the claims of Group VII, see e.g., claim 23. Applicants refer to page 27 of the specification which describe the isolation of the coding region of pro-PAP-S (SEQ ID NO: 1) from pokeweed leaf DNA, the amplification of PAP-S nucleotide sequence (SEQ ID NO: 3) from the pBS/pro-PAP-S clone (see page 28, lines 7-14); and the amplification of sequences encoding the α and β subunit fragments of PAP-S (SEQ ID NO: 5 and 7) from the PAP-S clone plasmid (see page 28, last line, to page 29, line 3). Applicants further invite the Examiner's attention to the sequence listing which shows the relatedness of the sequences of Groups I-III and VII: SEQ ID NO: 2 provides the amino acid sequence of pro-PAP-S which encompasses the amino acid sequence of PAP-S (SEQ ID NO: 4, positions 2-263 which is identical to position 25-286 of SEQ ID NO: 2); the amino acid sequence of PAP-S α fragment (SEQ ID NO: 6 which is identical to position 25-177 of SEQ ID NO: 2 and positions 1-154 of SEQ ID NO: 4); and the amino acid sequence of PAP-S β fragment (SEQ ID NO: 8 which is identical to position 178-286 of SEQ ID NO: 2 and positions 155-263 of

SEQ ID NO: 4). Thus, the sequences of PAP-S, PAP-S α and PAP-S β are clearly sub-sequences of pro-PAP-S. The inventions of Group I-III and VII are clearly not independent inventions.

Applicants also submit that the subject matter of claims 5 and 35 (PAP') are improperly classified in Group IV and the subject matter of claim 6 (PAP II) is improperly classified in Group V. Mature PAP' and PAPII are formed by terminal deletions from their precursor molecules and are related to the precursor PAP molecules claimed in Group VII.

Furthermore, contrary to the Examiner's assertion, the claimed methods of Groups I, II, III, IV, V, VI, and VII rely on essentially the same protein function(s) resulting in the same effect of inducing a necrotic effect in a plant. As for Group VI, the proteins encoded by the first chimeric genes encompassed by the methods of claim 10 and dependent claims also rely on the same function(s) to produce a necrotic effect. The first chimeric genes used in the claimed methods of Group VI comprise PAP-S and subsequences, PAP' and PAPII sequences claimed in Groups I-V and VII.

Applicants assert that for one to search the subject matter of claims of Group VII, i.e. a precursor PAP protein molecule, which comprise the active α and β domains, mature PAP proteins, and mature PAP proteins with terminal deletions, one would necessarily be searching art relating to domains and mature proteins of the same PAP protein and chimeric genes comprising these domains and mature proteins as recited in the methods of claims of Groups I, II, III, IV, V and VI. The M.P.E.P. § 803 (Eighth Edition, August 2001) states:

> If the search and examination of an entire application can be made without serious burden, the examiner 'must' examine it on the merits, even though it includes claims to distinct or independent inventions.

Thus, in view of the M.P.E.P. § 803, even if for arguments sake, the subject matter of Groups I, II, III, IV, V, and VI are distinct inventions, the subject matter of Groups I, II, III, IV, V, and VI would necessarily be searched and examined in the search of the subject matter of Group VII and, therefore, would not be a "serious burden" on the Examiner.

Applicants respectfully request the Examiner to place claims 1-32 within a single group. Accordingly, Applicants respectfully request that the restriction requirement be withdrawn and the instant claims be examined in one application.

Alternatively, Applicants respectfully request that the restriction requirement be modified such that Groups I, II III, and VI are combined and examined together with Group VII in the instant application. Even assuming *arguendo* that Groups I-III and VI-VII represent distinct or independent inventions, Applicants submit that the *same* subject matter would have to be searched for all of these Groups and thus combining them would not be a serious burden on the Examiner.

As another alternative, Applicants respectfully request that the restriction requirement be modified such that Groups I, II and III are combined and examined together with Group VII in the instant application. Even assuming *arguendo* that Groups I-III and VII represent distinct or independent inventions, Applicants submit that the *same* subject matter would have to be searched for all of these Groups and thus combining them would not be a serious burden on the Examiner.

Applicants retain the right to petition from the restriction requirement under 37 C.F.R. § 1.144.

CONCLUSION

Applicants respectfully request that the foregoing amendment and remarks be entered and made of record in the file history of the application.

Respectfully submitted,

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Enclosures